

Claims

- [c1] 1.A system for maintaining a child's feet in a predetermined therapeutic arrangement, the system comprising:
a splint comprising:
a rigid elongated member comprising a left end and a right end;
a right shoe engaging plate adjustably coupled to said elongated member;
a right end adjustment mechanism disposed between said right shoe engaging plate and said elongated member, said right end adjustment mechanism for making angular adjustments;
a quick release mechanism coupled to said right shoe engaging plate; and,
a recess integrally formed in a sole of a shoe, wherein said recess is configured to receive and selectively latch therein said quick release mechanism.
- [c2] 2.A system of claim 1 wherein said sole is a single piece of molded material.
- [c3] 3.A system of claim 1 wherein said shoe has an orifice on each side of the heel which permits viewing of a patient's foot as it is inserted into said shoe.

- [c4] 4.A system of claim 3 wherein said orifice extends across the heel to both sides of the heel.
- [c5] 5.A system of claim 3 wherein said orifice on each side of the heel is a plurality of discrete orifices separated by material across a portion of said shoe configured to surround a portion of a patient's heel.
- [c6] 6.A system of claim 2 where said sole has an integrally formed raised portion thereon to act as a heel of said shoe and wherein said quick release mechanism includes a quick release button which releases attachment when pressed in a direction toward said sole and an interior portion of said shoe.
- [c7] 7.A system for maintaining a child's feet in a predetermined therapeutic arrangement, the system comprising:
a splint comprising:
a rigid elongated member comprising a left end and a right end;
a shoe engaging plate adjustably coupled to said elongated member;
a right end adjustment mechanism disposed between said shoe engaging plate and said elongated member, said right end adjustment mechanism for making angular adjustments;

a shoe coupled to said shoe engaging plate; and,
said shoe comprising a single piece inner foot cradling
insole member.

- [c8] 8.A system of claim 7 wherein said single piece inner
foot cradling insole member has a relatively flat insole
sole foot side and a pair of opposing insole side walls
and an insole heel support section.
- [c9] 9.A system of claim 8 wherein absence of material in
said insole heel support section permits visual inspection
from both sides of a patient's heel of placement of a pa-
tient's heel into said insole heel support section and
contact with said insole sole foot side.
- [c10] 10.A system of claim 9 wherein said absence of material
is a plurality of discrete insole heel right viewing holes
disposed on opposing sides of said insole heel support
section.
- [c11] 11.A system of claim 7 wherein said shoe has integrally
formed therein structure for mating with said shoe en-
gaging plate.
- [c12] 12.A system of claim 11 further comprising a quick re-
lease button coupled to said shoe engaging plate, said
quick release button being configured to snap into a
locked configuration when inserted beyond a predeter-

mined location, and said quick release button further being configured to release said shoe from said shoe engaging plate when a force is applied on said quick release button in a direction toward said sole of said shoe and further in a direction toward said single piece inner foot cradling insole member.

- [c13] 13.A system of claim 12 wherein said right end adjustment mechanism comprises a first threaded means for pivoting a bar around an axis; and a second threaded means, which is not symmetrical about said axis, said second threaded means for fixing an angular adjustment at a discrete predetermined arrangement.
- [c14] 14.A system of claim 7 wherein said shoe engaging plate is not coupled to said shoe by a threaded elongated member.
- [c15] 15.A system of claim 14 wherein said shoe is coupled, via a quick release mechanism, to a first end of an adjustable splint assembly.
- [c16] 16.A system of claim 15 further comprising a second shoe coupled to a second end of said adjustable splint assembly.
- [c17] 17.A system of claim 16 wherein said adjustable splint assembly further comprises a plurality of bars joined to-

gether by a bolt.

- [c18] 18.A system of claim 16 wherein said adjustable splint assembly further comprises a shoe separation setting device comprising a first set screw and a second set screw.
- [c19] 19.A system of claim 18 wherein said single piece inner foot cradling insole member has a plurality of protuberances which extend through holes in said sole of said shoe.
- [c20] 20.A method of treating a patient's club feet at a predetermined angular orientation and separation with respect to each other, the method comprising the steps of:
providing a first shoe with a sole having structure formed integrally therein, configured to couple with a first latching mechanism, without using an elongated threaded member extending into said sole,
inserting a patient's foot into said first shoe;
providing a second shoe with a sole having structure formed integrally therein, configured to couple with a second latching mechanism, without using an elongated threaded member extending into said sole;
providing an elongated member having an adjustable length;
coupling said first shoe to a first end of said elongated

member; and,
coupling said second shoe to a second end of said elongated member.

[c21] 21.A method of claim 20 further comprising the steps of:
depressing a button on said first latching mechanism, in a direction toward an interior portion of said shoe, and releasing said shoe from said elongated member;
making adjustments to angular orientations of said first latching mechanism and said second latching mechanism, by removing a screw and pivoting said first latching mechanism around a second screw;
fixing said adjustments at a predetermined setting by securing said first screw into a predetermined hole and tightening said second screw; and,
coupling said first shoe to said elongated member.

[c22] 22.A method of claim 21 further comprising the steps of:
making a length adjustment to said elongated member;
and,
tightening a first set screw and a second set screw to fix said elongated member at an infinitely variable length.